

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUN 1 9 2006

OFFICE OF AIR AND RADIATION

Mr. Toru Takehara President & CEO Paceco Corporation 25503 Whitesell Street Hayward, CA 94545

Dear Mr. Takehara:

The U.S. Environmental Protection Agency (EPA) has reviewed your request for verification of the Mitsui Engineering and Shipbuilding (MES) diesel particulate filter (MES-DPF). Based on our evaluation of the verification application and test data, EPA hereby verifies that this technology reduces emissions of certain criteria pollutants by the percentages described in the table below when used with low sulfur diesel fuel (<50 ppm S) as compared to a baseline engine running on the same fuel.

This technology combination is approved for use on the following categories of engines provided all of the required operating criteria are met as described below:

All pre-1996 4-cycle nonroad, heavy-duty diesel engines in the 225 - 450 kW (NR7) power range in electrical generation applications with low sulfur diesel (less than 50 ppm).

Technology	Fuel (sulfur content)	Particulate Matter (PM) %	Carbon Monoxide (CO) %	Hydrocarbons (HC) %	Oxide of Nitrogen (NOx) %
Mitsui Engineering and Shipbuilding diesel particulate filter (MES-DPF)	≤ 50 ppm	39	90	95	n/a

The following operating criteria must be met in order for appropriately retrofitted engines to achieve the aforementioned emissions reductions:

- 1. The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
- 2. The engine must be operated with a fuel that contains a sulfur content of no more than 50 ppm.
- 3. The engine exhaust temperature must be at least 250 degrees C for 50% of the duty cycle. (As there may be significant variations in applications, Paceco will review actual engine operating conditions and perform temperature data-logging prior to retrofitting an engine with this device on an unfamiliar application.)
- 4. A back-pressure monitor and warning light are to be installed on all engines equipped with this device.

Information on the MES-DPF System, percent reductions, applicable engines, and in-use testing program will be posted on the EPA Voluntary Diesel Retrofit Program website (www.epa.gov/otaq/retrofit). As you know, Paceco will be responsible for completing the required in-use testing program and for submitting all in-use testing data to EPA.

Thank you for participating in EPA's Voluntary Diesel Retrofit Program. If you have any questions or comments, please contact Carl Wick, of my staff, at (202) 343-9331.

Sincerely,

Karl Simon, Acting Director

Compliance and Innovative Strategies Division

Office of Transportation and Air Quality